

REMARKS

This Amendment, filed in reply to the Office Action dated February 22, 2008, is believed to be fully responsive to each point of rejection raised therein. Accordingly, favorable reconsideration on the merits is respectfully requested

I. Summary of Office Action

Applicant's arguments in the pre-appeal brief filed October 4, 2007 have been fully considered and are persuasive, and the final office action of June 4, 2007 has been withdrawn. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection based on Niida et al (USP 6,052,507; hereafter "Niida").

Claims 1, 2, 5, 9, 10 and 15 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable by Niida in view of Blatter et al (USP 5,838,873; hereafter "Blatter") in further view of Anderson et al (USP 6,091,772; hereafter "Anderson").

Claims 3, 4, 6, 7, 8, 11, 12, 13, 14, and 16 are rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Niida in view of Blatter in further view of Anderson in further view of Oishi et al (US 6,779,195; hereafter "Oishi").

II. Analysis of § 103 Claim Rejection

Claim 1, 10 and 15

In rejecting claim 1, the Examiner alleges that the packet parser recited in the claim is disclosed by Niida. Specifically, it is alleged that the recited "outputting *additional information* corresponding to the extracted packet identifier information (PID) and audio and/or video (AV) packet" is disclosed since "the PSI contains *additional information* regarding the data stream" as described in col. 5 lines 40-47 of the reference.

However, col. 5 lines 40-47 of Niida only discloses that program specific information (PSI) for specific reproduction (i.e., trick play of a video cassette recorder) is stored during normal reproduction and output; but does not disclose any *additional information* corresponding to the PID and AV packet, as recited in the claim, is output from any element of the recording/reproducing apparatus. This is particularly so when considering that this *additional*

information is clearly differentiated from the PID in the claim recitation itself, and further, defined as being inserted into a particular region in (within) the AV packet for storing.

As known in the art, AV data are transmitted in the form of a transport stream (TS) which comprises TS packets under the MPEG standards. Each TS packet may be an AV packet (program data packet itself) or a PSI packet containing a Program Association Table (PAT), a Program Map Table (PMT), and so on. As described in the specification, in order to store an AV data for a certain program, a general storage device satisfying the MPEG standard stores an AV packet and corresponding PSI packets together in the form of a single program TS packet (Fig. 1B). Accordingly, a large capacity storage medium is required for storing the PSI packets along with the AV packet. By contrast, the claimed AV storing apparatus is characterized in that the *additional information* corresponding to PID, extracted from a PSI packet, and an AV packet is produced, and inserted into a particular region of the AV packet (program data itself) instead of storing PSI packets *themselves* along with the AV packet in the form of a single program TS, whereby the capacity overload of a storage may be reduced. It should be noted again that the *additional information* is distinguished from a PSI packet and PIDs extracted from the PSI packet, as indicated in the claim recitation itself.

In view of the above characteristic of the present application, nowhere does the new reference (Niida) teach the packet parser outputting the additional information as recited in the claim. Further, no other references including Blatter and Anderson disclose the foregoing aspect of the claim as discussed in Applicant's previous response including the pre-appeal brief of October 4, 2007.

The Examiner admits that Niida fails to disclose the claimed audio/video producer; however, alleges again that it is disclosed by col. 2, lines 24+ and col. 4, lines 15+ of Blatter. The Examiner still appears to read the *additional information* on the condensed PSI (CPSI) of Blatter, the objective of which is alleged to reduce storage overhead caused by the size of PSI by adaptively inserting the CPSI in a packetized data stream (see Figs. 2 and 3; col. 2, lines 23-37; and col. 6, line 54+). However, the *additional information* is clearly distinguished from the CPSI of Blatter.

For the analysis of Blatter, it is necessary to note the form of the CPSI as disclosed in the reference. Even though the CPSI is described as being condensed form of PSI, it is still represented in the form of PSI which includes *PID values* since the CPSI includes renumbered PID values to distinguish individual data streams from one another. For example, Table I (col. 9) and relevant description (col. 9, lines 29-32) explicitly describes that the CPSI contains a PAT with a PID value (0400). The CPSI also contains a network information table (NIT) which still has a PID value (040E). Blatter also confirms this aspect of the CPSI by describing that “[t]he CPSI therefore comprises a PAT and a PMT and may also include either or both a CAT and [a] NIT” in col. 10, lines 39-40. However, the claimed *additional information* outputted from the packet parser only corresponds to the PID contained in a PSI (not in the form of a PSI), but does not include the PID that is extracted from the PSI, while the CPSI of Blatter still includes the PID. Specifically, this aspect of the claim is supported by the present specification (page 13, 1st paragraph and Fig. 7) which shows the *additional information* in a different form from that of PSI in the Fig 1B prior art. It should be also noted that the *additional information* is inserted to the *audio/video packet* which is clearly set apart from PSI packets, while the CPSI is inserted in selected *PSI location* after creation in the condensed form (see step 235 in Fig. 2 of Blatter). The location of the CPSI is also specifically mentioned in col. 13, lines 36-38 which reads “[i]n this manner, the packetized PAT, PMT, CAT and NIT sections of the CPSI are inserted into *PSI locations to replace the corresponding sections of the PSI.*” Thus, it is only suggested that Blatter uses a different form of PSI allegedly being condensed to reduce the storage overhead, while the claimed apparatus takes advantage of the *additional information* inserted in an AV packet in a form different from that of the PSI. Thus, even if the CPSI is alleged to correspond to the *additional information*, Blatter fails to disclose that CPSI is inserted into a particular region within an *AV packet*. Here the AV packet should be interpreted as a portion of a TS in which a PSI packet is included separately from an AV packet. Thus, Blatter does not teach or suggest the claimed audio/video producer

In the meantime, the Examiner still asserts that Anderson teaches the *additional information* by stating that “Anderson et al teaches the use of additional information that is sent through the MPEG-2 transport layer containing content of the transport stream and thus not

containing packet identifier information as described in col. 5, lines 50+” (page 3, last line to page 4, line 3). Applicant respectfully submits again that neither the “additional information” (col. 5, line 53) nor the “information” (col. 5, line 55) teaches or suggests the claimed additional information.

As stated in the reference, the “information” defines the content of the stream (col. 4, lines 44-45), but the “information” is contained in the tables such as PAT, PMT, etc. which constitute a PSI packet (col. 4, lines 54-56), but not in the content of the stream (i.e., program data packet). Thus, it is clear that this “information” is not such information which is inserted into an AV packet itself (program data packet containing the content of the stream), and there is no such teaching or even suggestion in the reference. As to Anderson’s “additional information” (related or unrelated to the corresponding audio/video data), this “additional information” is described as being transported in the form of a transport packet, but there are no comments in the reference whether it is transmitted as a part of an AV packet. Instead, it clearly states that “[t]his additional information is predominantly sent in the MPEG-2 Transport Layer table sections”. Here, the table sections mean the tables of a PSI packet. This statement means that Anderson’s additional information is sent in a PSI packet. As discussed thus far, a PSI packet is clearly not an AV packet as understood throughout the present application including the claims. Therefore, since Anderson’s “additional information” is contained in a PSI packet while the claimed *additional information* is contained in an AV packet, Anderson fails to teach or suggest the claimed *additional information*.

In short, none of Niida (the new reference), Blatter and Anderson (the previous references) teaches or suggests the packet parser for outputting the additional information as recited in the claim, and the audio/video producer for inserting the additional information into a particular region of the AV packet.

Therefore, claim 1 and corresponding claims 10 and 15 would not have been obvious over Niida in view of Blatter and Anderson.

Dependent claims 2, 5, 9, 14 and 16 should be allowable at least by virtue of their dependency from claim 1, 10 or 15, respectively, and additionally recited elements.

In rejecting claim 3, the Examiner again fails to mention how the claimed time data table (TDT) parser is disclosed in the references. As recited in the claim, the additional information is output from each of the EIT, SDT and TDT parsers, and this additional information is distinguished from the event information table (EIT), service description table (SDT) or TDT packet itself. In this respect, no references, taken alone or in combination, teach or suggest that the EIT, SDT or TDT parser outputs the additional information other than the respective EIT, SDT or TDT packet itself. Therefore, claim 3 would not have been obvious over the references including Oishi. Claim 3 and dependent claims 4, 6-8 and 11-13 should also be allowable at least by virtue of their dependency from claim 1, 10 or 15, respectively, and additionally recited elements.

III. Miscellaneous Amendment

Applicant amends claims 9, 14 and 16 to amend minor informalities.

IV. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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